



JPW

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
Group Art Unit 3762

In re

Patent Application of

Edward J. Coleman, et al.

Application No. 10/829,573

Confirmation No.: 6731

Filed: April 22, 2004

Examiner: Jastrzab, Jeffrey R.

"IMPLANTABLE CARDIAC ASSIST
DEVICE"

INFORMATION DISCLOSURE STATEMENT
PURSUANT TO 37 CFR §1.97(c)

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

The Examiner's attention is directed to the references which are listed on the attached Form PTO/SB/08A and/or PTO/SB/08B and copies of which are attached. This Statement is also being accompanied by a check in payment of the \$180.00 fee required under 37 CFR §1.17(p). Please charge or credit Deposit Account No. 50-0842 with any shortage or overpayment of the required fee.

Citation of these references is respectfully requested.

No concession is made that these documents are prior art, and Applicant expressly reserves the right to antedate the documents as may be appropriate.

02/14/2005 AHONDAF1 00000075 10829573

01 FC:1806

180.00 OP

File No. 021587-9001-02
Michael Best & Friedrich LLP
One South Pinckney Street
P. O. Box 1806
Madison, WI 53701-1806
(608) 257-3501

I, Leslie Rector, hereby certify that this correspondence is being deposited with the US Postal Service as first class mail in an envelope addressed to Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date of my signature.

Signature *Leslie Rector*

Date of Signature *February 8, 2005*

Respectfully submitted,

Grady J. Frenchick
Grady J. Frenchick
Reg. No. 29,018

Substitute for form 1449A/PTO

(Rev. 2-92)

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT:**

Complete if Known
 Application Number: 10/829,573
 Filing Date: April 22, 2004
 First Named Inventor: Edward Coleman
 Art Unit: 3762
 Examiner Name: Jastrzab, Jeffrey R.
 Attorney Docket Number: 021587-9001

(Use as many sheets as necessary)
 Sheet 1 of 1

U.S. PATENT DOCUMENTS

EXAMINER INITIALS*	Cite No.	DOCUMENT NUMBER	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code (if known)			
	AA	US-4,902,291	02-20-1990	KOLFF	All
	AB	US-4,957,477	09-18-1990	LUNDBÄCK	All
	AC	US-5,119,804	06-09-1992	ANSTADT	All
	AD	US-5,131,905	07-21-1992	GROOTERS	All
	AE	US-5,169,381	12-08-1992	SNYDERS	All
	AF	US-5,250,167	10-05-1993	ADOLF et al.	All
	AG	US-5,256,132	10-26-1993	SNYDERS	All
	AH	US-5,271,746	12-21-1993	POL et al.	All
	AI	US-5,273,518	12-28-1993	LEE et al.	All
	AJ	US-5,389,222	02-14-1995	SHAHINPOOR	All
	AK	US-5,397,349	03-14-1995	KOLFF et al.	All
	AL	US-5,429,584	07-04-1995	CHIU	All
	AM	US-5,533,958	07-09-1996	WILK	All
	AN	US-5,713,954	02-03-1998	ROSENBERG et al.	All
	AO	US-5,738,627	04-14-1998	KOVACS et al.	All
	AP	US-5,749,839	05-12-1998	KOVACS	All
	AQ	US-5,800,334	09-01-1998	WILK	All
	AR	US-5,902,229	05-11-1999	TSITLIK et al.	All
	AS	US-5,908,378	06-01-1999	KOVACS et al.	All
	AT	US-5,971,910	10-26-1999	TSITLIK et al.	All
	AU	US-5,971,911	10-26-1999	WILK	All
	AV	US-6,109,852	08-29-2000	SHAHINPOOR et al.	All
	AW	US-6,238,334	05-29-2001	EASTERBROOK III et al	All
	AX	US-6,254,525	07-03-2001	REINHARDT et al.	All
	AY	US-6,258,021	07-10-2001	WILK	All
	AZ	US-6,282,445	08-28-2001	REINHARDT et al.	All
	BA	US-6,464,655	10-15-2002	SHAHINPOOR	All
	BB	US-6,475,639	11-05-2002	SHAHINPOOR et al.	All

FOREIGN PATENT DOCUMENTS

EXAMINER INITIALS*	Cite No.	Foreign Patent Document Country Code Number Kind Code (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	✓ if Eng. Translation Attached.

EXAMINER
SIGNATURE

DATE CONSIDERED

*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Substitute for form 1449B/PTO

(Rev. 2-92)

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT:**

Application Number: Complete if Known
 10/829,573
 Filing Date: April 22, 2004
 First Named Inventor: Edward J. COLEMAN
 Art Unit: 3762
 Examiner Name: Jastrzab, Jeffrey R.
 Attorney Docket Number: 021587-9001

(Use as many sheets as necessary)

Sheet 1 of 5**NON PATENT LITERATURE DOCUMENTS**

EXAMINER INITIALS*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	✓ if English translation provided
	BC	ABIOMED , 25 web pages, beginning with article, "Ky. Patient gets artificial heart," from <u>www.abiomed.com</u> on 7/3/2001.	
	BD	ABIOMED , Annual Report, 27 pages from <u>www.abiomed.com</u> on 3/15/2001.	
	BE	ADVANCED TECHNOLOGY DEVELOPMENT CENTER-ATDC , 2 web pages about ATDC, from <u>www.atdc.org</u> on 9/18/2002.	
	BF	ALLAN , R., "Medtronic sets the pace with implantable electronics," Success Story/Heart Pacemakers, <u>www.elecdesign.com</u> , pp. 52-56 (Oct. 27, 2003). (7-pg. Copy provided is from Web and does not reflect article page numbers).	
	BG	ANSTADT , G. L., et al., "Prolonged circulatory support by direct mechanical ventricular assistance," <i>Trans. Amer. Soc. Artif. Int. Organs</i> , Vol. XII, pp. 72-79 (1966).	
	BH	AURICCHIO , Angelo, et al., "Cardiac resynchronization therapy: current state of the art," <i>Circulation</i> , 109:300-307 (2004).	
	BI	BAR-COHEN , Y., et al., "Electro-active polymer (EAP) actuators for planetary applications," SPIE No. 3669-05, pp. 1-6 (1999).	
	BJ	BENCINI , Adriano, et al., "The "pneumomassage" of the heart," <i>Surgery</i> , 39:3, pp. 375-384 (Mar. 1956).	
	BK	BONSOR , Kevin, "How artificial hearts work," 3 pages from <u>www.howstuffworks.com</u> on 6/13/2002.	
	BL	BOURDON medical device, 1 pg., faxed by client 4/20/2004, source not identified.	
	BM	BUCKBERG , Gerald D., "Basic science review: the helix and the heart," <i>J Thorac Cardiovasc Surg</i> , 124:5, pp. 863-883 (Nov. 2002).	
	BN	BURNS , W. H., et al., "Hemodynamic studies with a new pulsatile pump," <i>Trans. Amer. Soc. Artif. Int. Organs</i> , Vol. XI, pp. 65-67 (1965).	
	BO	BUXTON , Denis B., "Recommendations of the National Heart, Lung, and Blood Institute Nanotechnology Working Group," <i>Circulation</i> , 108:2737-2742 (Dec. 2, 2003).	
	BP	CARRINGTON , Russell A. J., et al., "Direct compression of the failing heart reestablishes maximal mechanical efficiency," <i>Ann. Thorac. Surg.</i> , 75:190-196 (2003).	
	BQ	COOLEY , Denton A., Editorial, "Initial clinical experience with	

EXAMINER
SIGNATURE

DATE CONSIDERED

*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Substitute for form 1449B/PTO

(Rev. 2-92)

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT:**

Application Number: Complete if Known
 10/829,573
 Filing Date: April 22, 2004
 First Named Inventor: Edward J. COLEMAN
 Art Unit: 3762
 Examiner Name: Jastrzab, Jeffrey R.
 Attorney Docket Number: 021587-9001

(Use as many sheets as necessary)

Sheet 2 of 5

		the Jarvik 2000 implantable axial-flow left ventricular assist system," <i>Circulation</i> , 105:2808-2809 (2002).	
	BR	DELGADO , Diego H., "Mechanical circulatory assistance," <i>Circulation</i> , 106:2046-2050 (2002).	
	BS	DOWLING , Robert D., et al., "Operative techniques for implantation of the AbioCor total artificial heart," <i>Op Techniq Thorac Cardiovasc Surg</i> , 7:3,139-151 (Aug. 2002).	
	BT	ENDOCARDIAL SOLUTIONS , "Guiding the direction of cardiac therapies," Annual Report 2002, St. Paul, MN, at www.endocardial.com (7 pages).	
	BU	ENDOCARDIAL SOLUTIONS , "Endocardial Solutions announces first successful human NAVEX procedure," www.endocardial.com , (14 Aug. 2002 Press Release), 1 page.	
	BV	FAUBER , John, "Pacemaker/defibrillator pair touted, Milwaukee J. Sentinel, 2 pages (May 24, 2004), from www.jsonlin.com .	
	BW	FAUBER , John, "Devices simplify heart repair," Milwaukee J. Sentinel, 2 pages, Nov. 12, 2001, from www.jsonline.com .	
	BX	FAUBER , John, "Heart pump found to dramatically improve patient survival rate," Milwaukee J. Sentinel, 2 pages, Nov 13, 2001, from www.jsonline.com .	
	BY	FAUBER , John, "A helping hand for ailing hearts," Milwaukee J. Sentinel, 4 pages, Aug. 26, 2004, from www.jsonline.com .	
	BZ	FIRST WORLD CONGRESS ON BIOMIMETICS AND ARTIFICIAL MUSCLES , 3 web pages advertising Dec. 9-11, 2002 congress, from www.world-congress.net on 12/8/02.	
	CA	FORMAN , David, "Companies use trials to prove marketability," <i>Smalltimes</i> , p. 40, Sep./Oct. 2002.	
	CB	FRAZIER , O. H., et al., "Initial clinical experience with the Jarvik 2000 implantable axial-flow left ventricular assist system," <i>Circulation</i> , 105:2855-2860 (2002).	
	CC	HALL , Stephen S., "Brain Pacemakers," <i>Technology Review</i> , pp. 34-43 (Sept. 2001).	
	CD	HENDRY , Paul J., et al., "Implantation technique for the Heartsaver Left Ventricular Assist Device," <i>Op Techniq Thorac Cardiovasc Surg</i> , 7:3,152-157 (Aug. 2002).	
	CE	HILL , J. Donald, "Implantation of the Thoratec Ventricular Assist Device," <i>Op Techniq Thorac Cardiovasc Surg</i> , 7:3,158-170 (Aug. 2002).	
	CF	HUANG , Gregory T., "Electroactive polymers," <i>Technology Review</i> , p. 32 (Dec. 2002/Jan. 2003).	

EXAMINER
SIGNATURE

DATE CONSIDERED

*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Substitute for form 1449B/PTO

(Rev. 2-92)

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT:**

Application Number: **Complete if Known**
 10/829,573
 Filing Date: April 22, 2004
 First Named Inventor: Edward J. COLEMAN
 Art Unit: 3762
 Examiner Name: Jastrzab, Jeffrey R.
 Attorney Docket Number: 021587-9001

(Use as many sheets as necessary)

Sheet 3 of 5

CG	JOHNSON , R. Colin, "Robot researchers get some hints from nature," <i>Electronic Engineering Times</i> , p. 57 (Sept. 9, 2002).
CH	KAROUB , Jeff, "'Stentennas' could signal change in monitoring arteries," <i>Smalltimes</i> , pp. 57 (Mar/Apr 2004).
CI	KAROUB , Jeff, "Biotech meets small tech," 2 pages., no publication info available, no date.
CJ	KESHAVARZI , A, et al., "Blood pressure, pulse rate, and rhythm measurement using ionic polymer-metal composites sensors," SPIE, 3669:369-376 (March 1999).
CK	KOLOBOW , Theodor, and BOWMAN , Robert L., "Biventricular cardiac assistance energized by suction actuated recoil of a single constricting rubber ventricle," <i>Trans. Amer. Soc. Artif. Int. Organs</i> , Vol. XI, pp. 57-67 (1965).
CL	MAGOVERN , James A., et al., "Implantation of the TandemHeart Percutaneous Left Ventricular Assist Device," <i>Op Techniq Thorac Cardiovasc Surg</i> , 7:3, 112-119 (Aug. 2002).
CM	MEDFACTS , "Understanding heart valve surgery," 3 pages, from www.crdiodoc.com on 3/15/2001.
CN	MEDTRONIC , "Medtronic announces FDA approval of new GEM® III AT Defibrillator with atrial therapies," Press Release, www.medtronic.com (Feb. 13, 2001), 3 pages.
CO	MEDTRONIC , Press Release, "Medtronic announces first implant of over-the-wire-left-heart lead to treat heart failure," 3 pages from www.medtronic.com , on 3/20/2001.
CP	MENICANTI , Lorenzo, et al., "The Dor procedure: what has changed after fifteen years of clinical practice?," <i>J Thorac Cardiovasc Surg</i> , Vol. 124: 886-890 (2002).
CQ	METHODIST HOSPITAL , et al. "The Methodist Hospital and Baylor College of Medicine surgeons implant first U.S. patient with MicroMed DeBakey Ventricular Assist Device™", Methodist Health Care System, Houston, TX, http://www.methodisthealth.com/vad/ , 3 pages (June 8, 2000).
CR	MICROMED TECHNOLOGY, INC. , www.micromed.com , "The MicroMed DeBakey VAD," 3 pages, printed from Internet 3/16/2001.
CS	NOON , George P., et al., "Implantation of the MicroMed DeBakey VAD," Michael E. DeBakey Dept Surg, DV Transpl & Assist Devices, Baylor, Houston, TX, Elsevier Science (USA), 1522-2942/02/0703-0000, pp. 126-138 (2002).

EXAMINER
SIGNATURE

DATE CONSIDERED

*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Substitute for form 1449B/PTO

(Rev. 2-92)

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT:**

Application Number: Complete if Known
 10/829,573
 Filing Date: April 22, 2004
 First Named Inventor: Edward J. COLEMAN
 Art Unit: 3762
 Examiner Name: Jastrzab, Jeffrey R.
 Attorney Docket Number: 021587-9001

(Use as many sheets as necessary)

Sheet 4 of 5

CT	ORLANDO , FL., newspaper article, "New pacemaker can aid those with heart failure," no date.
CU	PHILADELPHIA INTERNATIONAL MEDICINE NEWS BUREAU , 6 web pages regarding ACORN Cardiac Support Device, from www.philadelphiaintmed.com on 10/5/2001.
CV	SAAVEDRA , W. F., et al., "Reverse remodeling and enhanced adrenergic reserve from passive external support in experimental dilated heart failure," <i>J. of Amer. College of Cardiology</i> , 39:12, pp. 2069-2076 (Jun 19, 2002).
CW	ST. JUDES , "St. Jude heart valve recall," 2 pages, from www.stjude.com on 3/15/2001.
CX	SIDAWI , Danielle, "Medical applications adopt MEMS technology," <i>R&D Magazine</i> , pp. 48-49 (Feb. 2004).
CY	STUART , Candace, "Obstacles clutter path for implant sector," <i>Smalltimes</i> , p. 36, Sep./Oct. 2002.
CZ	TECHNOLOGY REVIEW , "Setting the pace," author unknown, p. 96 (Sept. 2001).
DA	TEXAS A&M UNIVERSITY , Biomedical Engineering Program, "This web page is meant to provide access to links about several different types of heart assist medical devices or procedures," 7 pages from www.biomed.tamu.edu on 3/16/2001.
DB	TEXAS HEART INSTITUTE , "Official statement of the Texas Heart Institute and St. Luke's Episcopal Hospital," Apr. 11, 2000. (2 pages from www.tmc.edu on 6/13/2002).
DC	TEXAS HEART INSTITUTE , "FDA approves heart-assist device first tested at Texas Heart Institute," 2 pages, October 7, 1998, from www.tmc.edu on 6/13/2002.
DD	THORATEC , "Circulatory support products commercially available in the United States," 1 page, from website www.thoratec.com on 11/13/2001.
DE	UNIVERSITY OF IOWA HEALTH CARE , "Optimizing treatment of patients with advanced heart failure," 5 pages from www.uihealthcare.com on 3/15/2001.
DF	VAN NOSTRAND's Scientific Encyclopedia , 8 th ed. (1995) (4 pages: 2 front cover pages, and 2 pages which define a Bourdon Tube).
DG	VERRENGIA , Joseph B., "Cell injections might fix heart damage," <i>AP Science Writer</i> , 2 pages, published 04/06/2001. Copy obtained from www.ararillonet.com .

EXAMINER
SIGNATURE

DATE CONSIDERED

*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Substitute for form 1449B/PTO

(Rev. 2-92)

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT:**

Complete if Known
Application Number: 10/829,573
Filing Date: April 22, 2004
First Named Inventor: Edward J. COLEMAN
Art Unit: 3762
Examiner Name: Jastrzab, Jeffrey R.
Attorney Docket Number: 021587-9001

(Use as many sheets as necessary)

Sheet 5 of 5

	DH	VINEBERG , Arthur, "Short communications: mechanical heart massager," <i>Canad. M.A.J.</i> , Vol. 77, pp. 495-498 (Sep. 1, 1957).	
	DI	VOSS , David, "Smart home care," Technology Review, publication/date unknown, 1 page.	
	DJ	WECHSLER , Andrew S., et al., Editorial, "Video comes to the Journal," <i>J Thorac Cardiovasc Surg</i> , 124:5, pp. 884-885 (Nov. 2002).	
	DK	WOLCOTT , Mark W., et al., "A mechanical heart massager: a preliminary report," <i>Surgery</i> , 48:5, pp. 903-906 (Nov. 1960).	

EXAMINER
SIGNATURE

DATE CONSIDERED

*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.